

Upper Little Sac River AgNPS SALT Final Report (Greene County)

The Upper Little Sac River AgNPS SALT project is located in north central Greene County. The project covers an area of approximately 44,959 acres and has over 100 miles of flowing streams. The watershed is made up of two sub-watersheds, the Fulbright Spring Recharge area and the Fellows/ McDaniel Lake watershed. The primary purpose of Fulbright Spring, Fellows Lake and McDaniel Lake is to provide public drinking water to the city of Springfield. Classified as a sensitive area by the Department of Natural Resources, this watershed is very unique because underground recharge areas and surface drainage areas do not always coexist like they do in this area.

Although home to the third largest city in the state, Greene County is still very agriculturally productive. Greene County ranks 3rd in the state in hay production and 7th in beef cow numbers. In the Upper Little Sac River Watershed, there are an estimated 230 farms with approximately 5600 head of beef cattle. Land use is estimated at 59% grassland, 23% woodland, 3% reservoirs and only 14% roads, streams, farmsteads and urban areas.

In the Upper Little Sac River AgNPS SALT project the major problems identified by the district included non-point pollutants, including sediment, nutrients, and bacteria due to poor land management practices. Sinkhole protection and abandoned wells were other areas of concern. Riparian corridors and pasturelands were also found to be in need of treatment to prevent soil erosion and sediment buildup in streams.

The goals of the project were set by the project steering committee and the District board. They included improving or maintaining water quality and quantity, soil erosion, improving groundwater quality, improving management of grasslands, timber and providing public information and education.

Over 80% of the goals for this project were met using a variety of best management practices and education activities. By far the most successful practice was the N123 water development practice. Based on a four pasture rotation this practice helped distribute grazing by installing 33,989 feet of pipeline on 20 different grazing systems on 2063 acres of pasture. Other successful practices included the protection of Riparian areas on 22,378 feet of streambank with 16,568 feet of pipeline installed for alternative sources of livestock water. 633 acres of pasture were improved through legume interseeding and the establishment of warm and cool season grasses, nutrient management was planned and completed on 560 acres of hay and cropland.

Another successful part of the project was an information and education campaign in area schools. An educational program on soil erosion and water quality was presented to over 2000 students in 65 different classrooms. This is in addition to the annual District poster contest targeting area 4th and 5th graders. SALT project newsletters were mailed out biannually in addition to the regular District newsletter. Over 8000 letters and postcards were mailed encompassing various practices available to landowners in the

watershed. The project also held 22 field days, tours, and meetings with watershed area landowners.

One of the few areas of limited success was the abandoned well plugging practice. The project only completed 5 well pluggings despite many mailings being sent out advertising the practice. It seemed the cost share rate was not sufficient enough to produce a large amount of interest in that practice.

With the completion of this project the Greene County SWCD board and the SALT steering committee felt that the amount of interest raised in the public and the number of producers assisted by this project was substantial. The practices installed and the education and information presented to the public will benefit this watershed for many years. This project has also served to point out other sources of water quality problems that were not addressed. This has lead the District board to be proactive in looking for other ways to address these issues, thus ensuring this watershed will be a priority in the county for many years to come.

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Chairman, Greene SWCD